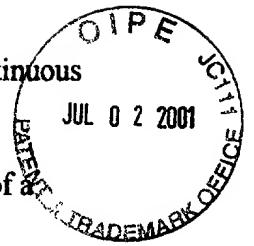


What is claimed is:

### Claims



1. A method for the treatment of diseases comprising vasospasm or other symptom alleviable by smooth muscle relaxation, comprising in combination:
  - a) measuring blood flow in at least one area;
  - b) administering a first dosage of a vasodilator;
  - c) remeasuring blood flow, and;
  - d) administering a further dosage of a vasodilator, said further dosage being adjusted in response to the remeasured blood flow;
  - e) continuing said treatment over a period of days while titrating said dosage according to still further measurements of blood flow to maintain optimal blood flow velocity.
2. A method according to Claim 1 wherein the symptoms comprise cerebral vasospasm.
3. A method according to Claim 1 wherein the measuring comprises a technique selected from the group consisting of Transcranial Doppler (TCD), quantitative electroencephalogram and determining relative vessel diameter.
4. A method according to Claim 1 wherein the blood flow is measured as Mean Fluid Velocity (MFV) in at least one intracranial vessel.
5. A method according to Claim 4 wherein the MFV rises above about 0.4 meters/minute during vasospasms.
6. A method according to Claim 1 wherein the treatment is continued for from about 5 to 250 weeks.
7. A method according to Claim 1 wherein the vasodilator is selected from the group consisting of Nitroglycerin in pill, patch, ointment, cream, inhaler, spray and other forms, Nitroglycerin equivalents and substitutes, such as p.o. clonidine, Dynacirc (isradipine), hydrazine, nifedipine, and medicines from the empirical group of medications which have the common characteristic of causing smooth muscle relaxation and which systemically reduce pulmonary capillary wedge pressure, and combinations of the foregoing.
8. A method according to Claim 1 wherein the disease is selected from the group consisting of whiplash, closed head injury with vasospasm, attention deficit disorder with vasospasm, migraine with inter-ocul evidence of vasospasm, syncope or blackout spells of unknown aetiology with evidence of vasospasm, seizure with evidence of vasospasm, and dementia with evidence of vasospasm, concussion and post-concussion syndrome with evidence of vasospasm, migraine, sympathetic vasospasm associated with breast implants, and cerebral vasospasm.
9. A method according to Claim 1 wherein the disease is selected from the group consisting of dyslexia, memory disturbances, depression, psychosis, reflex sympathetic dystrophy, mood disorders and sensory motor disorders; transient ischemic attack (TIA), pseudoseizure, hemibalism, and stroke; tremor, Parkinson's disease, torticollis, electrical shock trauma, attention deficit disorder, concussion and post concussion syndrome, in which vasospasm can be detected.



10. A method of Claim 1 wherein the patient treated initially presents with transient or continuous TCD Mean Flow Velocities (MFV) of greater than 0.1 meter per second.

11. A method of treatment of intracranial vasospasms comprising intermittent application of a vasodilator and reducing dosage as the vasospasms reduce in frequency and/or severity.

12. A method of Claim 1 wherein the treatment is applied to a patient who initially presents with transient or continuous TCD Mean Flow Velocities (MFV) of greater than 0.3 meters per second.

13. Vasodilator delivery systems specially adapted to deliver about 5 to 25% of conventional dosage of vasodilators and marked with the appropriate DRG and/or ICD 9th. codes and/or instructions for titrating or tapering their use, to facilitate their proper application for treatment of diseases involving vasospasms.

14. A delivery system according to Claim 13 adapted for transdermal delivery.

15. A delivery system according to Claim 13 adapted for delivery of about 0.02 to 20 milligrams per day (Nitroglycerine equivalent) of vasodilator.

16. A delivery system according to Claim 13 adapted for delivery of a vasodilator selected from the group comprising Nitroglycerin in pill, patch, ointment, cream, inhaler, spray and other forms, Nitroglycerin equivalents and substitutes, comprising p.o. clonidine, Dynacirc (isradipine), hydrazine, nifedipine, and/or other medicines selected from the empirical group of medications which have the common characteristic of causing smooth muscle relaxation and/or which systemically reduce pulmonary capillary wedge pressure, and combinations of the foregoing.

17. A method according to Claim 1 wherein the disease is selected from the group consisting of fibromyalgia, cardiac disease, gastric disorders and other systemic disorders, psychosis, other psychiatric disease, attention deficit disorder, comprising vasospasm as a component..

18. A method according to Claim 1 wherein the disease is selected from the group consisting of systemic disorders comprising vasospasm as a component.

19. A method for diagnosing and treating a disease caused at least partially by insufficient cerebral perfusion, comprising in combination: testing for presence of a continued diastolic flow beyond end diastolic velocity as an indication of vasospasm, administering a vasospasm-reducing dosage of a medicine selected from the empirical group of medications which have the common characteristic of causing smooth muscle relaxation and/or which reduce pulmonary capillary wedge pressure, repeating said testing over time and titrating said dosage to minimize occurrence and severity of said vasospasms.

20. Each invention substantially as described herein.